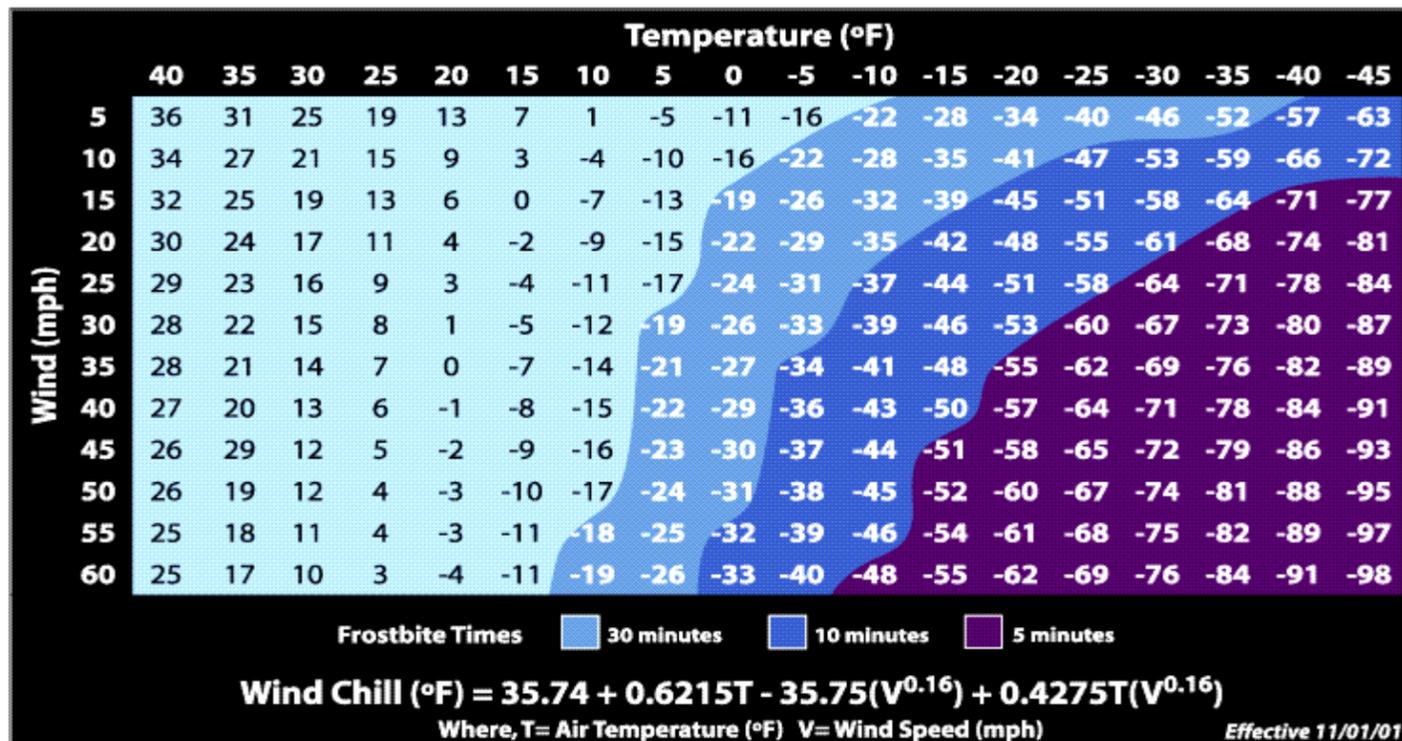




Wind Chill Chart



National Weather Service
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There is no such thing as bad weather, only different kinds of good weather.
 ~ John Ruskin

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SKY SCANNER

National Weather Service Forecast Office
 Aberdeen, South Dakota

January 2006

Remembering Bill Tallman

On October 16th, 2005, the National Weather Service office in Aberdeen was devastated by the tragic loss of our boss and friend William "Bill" Tallman. At the time of his death, Bill was on a voluntary temporary assignment with the Federal Emergency Management Agency to help with recovery efforts from the catastrophic hurricanes that hit the gulf coast this past fall. He was in Atlanta GA receiving training when he was struck by a massive heart attack while on an evening walk.



Bill arrived in Aberdeen as our first Science and Operations Officer in 1995, and was promoted to Meteorologist in Charge a year later, serving as our leader until his untimely death. During his time in Aberdeen, Bill led the office through many changes as we transitioned from a small office to a full fledged weather forecast office with warning and forecast responsibilities for 28 counties. Among Bill's many accomplishments, perhaps his most impressive and the one he enjoyed the most, was when he started the "Women in Science" conference. Women in Science is a program designed to introduce high-school age girls to the exciting career opportunities available in science. The first conference was held in Aberdeen in 2002 and has grown each year since. This year the conference will be offered in 5 different locations within South Dakota; Aberdeen, Hot Springs, Watertown, Pierre, and Sioux Falls.

Before coming to work for the National Weather Service, Bill spent over 20 years as a Meteorologist with the United States Air Force, retiring as a Major in 1993. Prior to his Air Force career, he was a high school math teacher.

Bill Tallman was a man who loved his family, honored his country, and valued people. He will be greatly missed by all who knew him.

Along with a grieving staff, Bill leaves behind his wife Julie, two children (Jeff and Sarah), 4 grandchildren, his mother, 4 brothers and 3 sisters. Bill was 58 years old.

INSIDE THIS ISSUE:	PAGE
Remembering Bill Tallman	1
Above Normal Temperatures	2
Snowfall Comparison	3
Holiday Weekend Blizzard	4
NOAA On-line Weather Data	5
U.S. Weather Year in Review	6
U.S. Weather Year in Review (cont.)	7
Wind Chill Chart	8

Above Normal Temperatures Continue Into 2006

by Travis Tarver

Since November, temperatures have been above normal for most of the upper Midwest, including the Aberdeen County Warning Area. So far in this early 2006 season, temperatures continue to be well above normal with no immediate signs of arctic outbreaks. The Climate Prediction Center had previously forecast a tendency for above normal temperatures across much of the upper Midwest, and thus far, indications point to this scenario panning out.

The overall weather pattern so far this winter has featured a split flow in the jet stream, with the polar branch remaining in Canada. The southern stream of the jet has been coming in off the Pacific, bringing in mild air. There have only been a few arctic outbreaks, those coming in December when much of South Dakota experienced lows in the teens and 20s below zero. Extreme cold temperatures are hard to come by when the jet stream is configured in such a pattern. January has been exceptionally mild compared to average for most of central and eastern South Dakota. With the abundance of Pacific moisture streaming into the upper Midwest, cloud cover has been a common occurrence. With the increased cloud cover comes warmer than average overnight lows. Low temperatures have been extremely mild compared to average because cloud cover prevents radiational cooling from having an effect on minimum temperatures.

The latest seasonal outlook through March from the Climate Prediction Center calls for equal chances for above or below normal temperatures for the upper Midwest. This means there are no strong indications in ocean temperatures or in the large scale global atmospheric circulations to suggest whether or not temperatures will have a tendency to be above or below normal. The remainder of January should be fairly seasonal with a few shots of colder air expected, which will bring temperatures back down to more normal values.

So far this January, average daily temperatures range from 24.6 degrees in Watertown to 35.1 degrees in Pierre. This is roughly 15 degrees above normal. Aberdeen's daily average as of January 17th was 26.3 degrees, which is 15.3 degrees above normal. Overnight lows on average should range from around 0 degrees across eastern South Dakota, to around 7 degrees across the central part of the state. Through the middle of January, overnight lows have been averaging anywhere from 18 to 21 degrees, with Pierre at a balmy 27.0 degrees. This is about 20 degrees warmer than average. Average January high temperatures range from 20 to 28 degrees from east to west across the Aberdeen CWA. Averages thus far are 32.4 degrees for Aberdeen, 30.6 degrees in Watertown, 35.6 degrees in Mobridge, 43.1 degrees in Pierre, and 32.8 degrees for Sisseton. These values are about 10 to 16 degrees above normal. Above normal temperatures were also observed for November and December, but not as extreme as January has been thus far in 2006. On average, temperatures were anywhere from 1 to nearly 5 degrees above normal.

Global

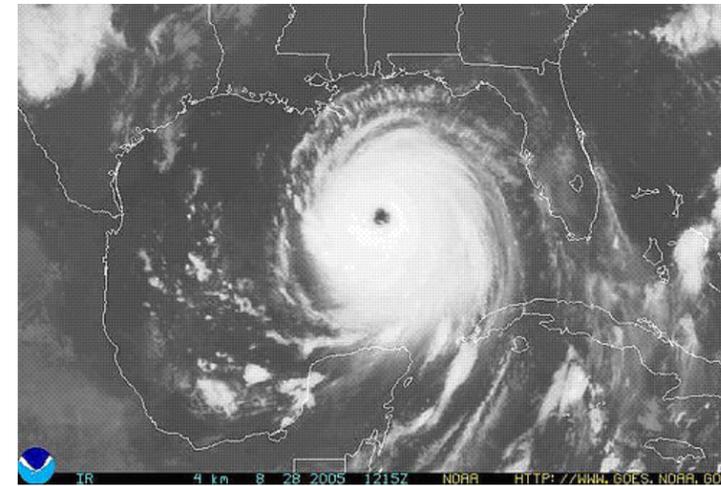
The global annual temperature for combined land and ocean surfaces was very close to the record global temperature that was established in 1998 under the influence of an extremely strong El Niño episode. There has been no such El Niño event in 2005, but rather, unusual warmth across large parts of the globe throughout the year. NOAA is in the process of transitioning to an improved global temperature analysis system. The data analysis system used by NOAA for global temperature analyses over the past eight years indicates that 2005 was the second-warmest year on record (1.06 degrees F; 0.59 degrees C above the 1880-2004 mean), marginally lower than 1998.

The largest temperature anomalies were widespread throughout high latitude regions of the Northern Hemisphere and included much of Russia, Scandinavia, Canada, and Alaska. During the past century, global surface temperatures have increased at a rate near 1.1 degrees F/Century (0.6 degrees C/Century), but the rate of temperature increase has been three times larger since 1976, with some of the largest temperature increases occurring in the high latitudes.

Reflecting the global warmth in 2005, a new record was established in September for the lowest Arctic sea ice extent since satellite monitoring began in the late 1970s, according to the National Snow and Ice Data Center. This is part of a continuing trend in end-of-summer Arctic sea ice extent reductions of approximately 8 percent per decade since 1979.

The year began with the continuation of a weak El Niño episode that developed in late 2004, but sea surface temperatures in the central and east-central equatorial Pacific decreased early in the year and the episode ended by late February. Few impacts from the weak El Niño occurred worldwide, and neutral conditions persisted for the remainder of the year.

Significant weather and climate events for the globe included: severe drought in parts of southern Africa and the Greater Horn of Africa, extreme monsoon-related rainfall in western India including a 24-hour rainfall total of 37.1 inches in Mumbai, the worst drought in decades in the Amazon River basin, severe drought in large parts of western Europe, and a record warm year in Australia.



Hurricane Katrina
August 28, 2005

NOAA REPORTS WARMER 2005 FOR U.S., NEAR-RECORD WARMTH GLOBALLY

HURRICANES, FLOODS, SNOW, WILDFIRES ALL NOTABLE

After a record-breaking hurricane season, blistering heat waves, lingering drought and a crippling Northeast blizzard, 2005 ended as a warm year in the United States. 2005 came close to the all-time high global annual average temperature, based on preliminary data gathered by scientists at NOAA's National Climatic Data Center in Asheville, N.C.

Warmer-than-average 2005 for U.S.

NOAA scientists report that the 2005 annual average temperature for the contiguous United States (based on preliminary data) was 1.0 degrees F (0.6 degrees C) above the 1895-2004 mean, which made 2005 one of the 20 warmest years on record for the country. Mean temperatures through the end of November were warmer than average in all but three states. No state was cooler than average. A July heat wave pushed temperatures soaring beyond 100 degrees, and broke more than 200 daily records established in six western states. A new record of seven consecutive days at or above 125 degrees F was established at Death Valley, Calif. The heat wave spread across the country during late July, scorching the East and prompted record electricity usage in New England and New York.

Drought, Rainfall and Snow

The 2004-2005 winter was a season of contrasts for the West, with excessive rainfall in the Southwest and severe drought in the Northwest. A parade of winter Pacific storms triggered severe flooding and devastating landslides in southern California and brought the second-wettest winter on record to the Southwest region. Record and near-record snowpack levels, which were widespread across the Southwest by early spring, eased drought in a region where it had persisted for five years. Meanwhile, drought conditions worsened in the Pacific Northwest and northern Rockies in early 2005 and snowpack in much of the region was at record low levels at the end of winter. However, above average precipitation in subsequent months led to improving drought conditions in much of the region.

During spring, the drought focus shifted to the Midwest and southern Plains. Severe dryness persisted across parts of northern Illinois, with Chicago and Rockford recording their driest March-November on record. Drought disasters were declared in all or parts of Arkansas, Illinois, Iowa, Kansas, Missouri, Texas, and Wisconsin. Drier-than-average conditions contributed to an active wildfire season that burned more than 8.5 million acres in 2005 -- 4.5 million acres consumed in Alaska alone, based on preliminary data from the National Interagency Fire Center. This exceeds the old record set in 2000 for acreage burned in a wildfire season for the U.S. as a whole. At the end of November, 18 percent of the contiguous U.S. was in moderate-to-extreme drought based on a widely used measure of drought (the Palmer Drought Index) in contrast to 6 percent at the end of November last year.

Record precipitation fell in the Northeast during the fall with three storm systems affecting the region in October. Nine states in the Northeast had their wettest October since 1895, and the October snowfall record on Mount Washington was shattered when 78.9 inches of snow fell during the month. Another notable snow storm in 2005 was the 'Blizzard of 2005', which brought more than two feet of snow across much of southern New England in late January. This storm ranked as the seventh most extreme snow event in the Northeast as measured by a newly developed Northeast Snowfall Impact Scale (NESIS) index and contributed to the snowiest January on record in Boston.

Tropical Cyclones and Hurricanes

The 2005 Atlantic hurricane season set several records. There were 26 named storms (storms with sustained winds of at least 39 miles per hour). In addition, there were an unprecedented 14 hurricanes, of which seven were major hurricanes (Category 3 or better on the Saffir-Simpson Scale). Three category 5 storms (sustained winds of 156 miles per hour or more) formed in the Atlantic Basin for the first time in a single season (Katrina, Rita, and Wilma). Four major hurricanes and three tropical storms made landfall in the U.S., with an eighth storm (Ophelia) brushing the North Carolina coast. Tropical cyclone activity was near to below average in the Eastern Pacific and Western North Pacific basins through early December.

Snowfall Comparison

by Scott Doering

After taking last winter off, snow has made a triumphant return this winter. Several places have already surpassed last years' snowfall totals with some locations achieving this in only one month. Watertown for example, recorded 12.7 inches of snow all last winter. For the month of December alone, they recorded 17.4 inches. With the yearly average in the 30 inch range, just about every location is on pace to meet or exceed their average. Below are the snow fall totals through January 18th.

Location	Last Year's Total	Yearly Average	This Year's Total through Jan 18
Aberdeen	13.3	36.1	17.2
Pierre	11.6	31.5	19.2
Mobridge	13.0	31.2	10.3
Watertown	12.7	31.3	26.4
Sisseton	13.1	37.2	25.7



1-605-225-0519

When significant or unusual weather events occur, give us a call! We're always happy to hear from the public, especially if you're calling to report freezing rain or snow accumulations of 2" or more. Don't wait until the next day...call us when it's happening.

Holiday Weekend Blizzard Blasts the Northern Plains

November 27th-28th

By Melinda Albrecht

The Thanksgiving weekend storm, nicknamed "Blizzard 2005," will certainly go down as a memorable one as it blasted through the Northern Plains like a freight train bringing strong winds, heavy snow, and significant amounts of ice to much of the area. The storm was blamed for numerous road closures, power outages, and school closings stretching from Colorado, Kansas, and northward into Nebraska, the Dakotas, and Minnesota. A very strong low pressure system originating over the Rockies late Saturday into Sunday, slid northeast through Iowa and into central Minnesota by Monday. The blizzard stranded numerous holiday travelers as many highways and Interstates remained closed into Tuesday. The National Weather Service here in Aberdeen issued a Winter Storm Watch Saturday morning alerting the area of an impending storm system moving into the area Sunday afternoon through Monday. Early Sunday morning the Winter Storm Watch was upgraded to a Winter Storm Warning for Sunday into Monday for much of the eastern two-thirds of the NWS Aberdeen County Warning Area. As the storm intensified early Monday morning Winter Storm Warnings were upgraded to Blizzard Warnings as heavy snow and ice helped make Blizzard 2005 one of the worst storms to hit the Northern Plains in recent years.

Across South Dakota heavy snow, strong winds, and freezing rain plagued much of the area beginning Sunday, not stopping until late Monday night into Tuesday. The heaviest snow fell in central South Dakota where Kennebec received 20 inches, Blunt and Miller at 12 inches, and Pierre with nearly 11 inches. Other areas across north central and northeast South Dakota saw between 2 and 6 inches of snowfall with this storm. The snow was responsible for hazardous travel, but the most dangerous problems across the state came from the freezing rain that led to significant ice accumulations on area power lines, trees, and roads. Freezing rain began to fall across the state and into west central Minnesota Sunday morning and finally changed over to sleet or snow Monday. The hardest hit areas with freezing rain stretched along a line from Mitchell northeastward to Webster and Watertown, toward Sisseton and also into Wheaton, MN. Much of the area in and around these cities received between 1 to 2 inches of ice accumulation, with some places in Roberts County in South Dakota and Big Stone and Traverse Counties in Minnesota receiving more than 2" of ice accumulation. The large amounts of ice also plagued counties in southeast North Dakota and west central Minnesota.

Due to the freezing rain and high winds tens of thousands of people across South Dakota, North Dakota, and Minnesota were left without power. Across South Dakota alone it was estimated that close to 8,000 or more power poles had either blown down or completely snapped off due to the hazardous wind/ice combination. Many towns and rural homes were left without power up to a week after the storm had ended, and in some of the hardest hit areas it took even longer to get power restored.



NOAA On-line Weather Data (NOWData)

by Dan Mohr

Would you like to search out and have easy access to various climatic information for many locations across our region? Then the implementation of NOWData on all National Weather Service homepages may be your answer. NOWData (NOAA On-line Weather Data) is coming to the all National Weather Service Climate pages, including the Aberdeen Climate page, this February. Climatic information such as: the greatest daily snowfall, the warmest monthly temperature, the greatest monthly precipitation, or the average frost/freeze dates, are just a few of the products you can access with the NOWData tool. Over fifty locations across central and northeast South Dakota, as well as west central Minnesota, will be available for you to retrieve all types of climatic information. The National Weather Service offices, as well as voluntary weather observers, have been collecting this data for many years. In fact, several of the climate stations have data as far back as the late 1800s.

The graphic below is what the NOWData section will look like on the local National Weather Service office homepages. The features in NOWData will allow you to access many types of climate data for the location of your choice for different time periods. For each of the products you select, a product description will appear at the bottom. The product description will help you understand clearly the product you are accessing.

The climate information in NOWData will be up-to-date for most of the locations while others may be a month or two behind. It is important to note that the climate information in NOWData is unofficial, and if you need official data for things such as litigation, you will have to get the official data from the National Climatic Data Center in Asheville, North Carolina. Finally, if you have any questions on the climatic data in NOWData or any other climate related questions, you can always give us a call here at the National Weather Service office in Aberdeen at 605-225-0519.

NOWData will be located at the following web address,

<http://www.weather.gov/climate/index.php?wfo=abr>

Observed Weather	Climate Locations	Climate Prediction	Climate Resources	Local Data/Records	Astronomical	NOWData
NOWData - NOAA Online Weather Data						
1. Product » <input type="radio"/> Daily data for a month <input type="radio"/> Daily almanac <input checked="" type="radio"/> Monthly avgs/totals <input type="radio"/> Monthly occurrences <input type="radio"/> Monthly extremes <input type="radio"/> Daily extremes <input type="radio"/> Daily/monthly normals <input type="radio"/> Record extremes <input type="radio"/> First/last dates	2. Location » Kansas City Intl, MO Amity 4 NE, MO Bethany, MO Boonville, MO Brookfield, MO Brunswick, MO Butler, MO Carrollton, MO Chillicothe, MO Clinton, MO	3. Variable » <input checked="" type="radio"/> Max Temperature <input type="radio"/> Min Temperature <input type="radio"/> Avg Temperature <input type="radio"/> Precipitation <input type="radio"/> Snowfall <input type="radio"/> Snow Depth <input type="radio"/> Heating Degree Days <input type="radio"/> Cooling Degree Days <input type="radio"/> Growing Degree Days	4. Year » <input checked="" type="radio"/> Current year <input type="radio"/> Last year <input type="radio"/> 1971-2000	5. View » <input type="button" value="Go"/>		
Product Description: MONTHLY AVERAGES/TOTALS - calculates averages or totals, as appropriate, for the selected variable for each month of the year. This product is available for the current year, the previous year, or an average of the years 1971 through 2000. Additional stations and years of data are						Questions, comments 
The Applied Climate Information System (ACIS) is a joint project of the Regional Climate Centers, the National Climatic Data Center and the National Weather Service. Official data and data for additional locations and years are available from the Regional Climate Centers and the National Climatic Data Center.						